



Class IV/V Supply Point Operations



AGENDA



- **Who Runs the Class IV/V Point?**
- ▢ **Methods of Resupply**
 - ▢ **Supply Point**
 - ▢ **Service Station**
 - ▢ **Tailgate**
- ▢ **Resupply Rules**
- ▢ **Class IV/V Point Location Considerations**
- ▢ **Requirements-Based Resourcing**
- ▢ **Planning Factors**
- ▢ **Personnel Requirements**
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 - ▢ **Marking the Class IV/V Point**



Who Runs the Class IV/V Supply Point?



The Class IV/V supply point is the central receiving point of obstacle material in the TF sector. It is the point at which the TF receives and transfers control of obstacle material pushed forward by higher levels. The supply point is established and operated by the TF and is centrally located to support all planned obstacles within the TF sector. Where the tactical obstacle plan allows, the supply point should be located near the TF combat trains to better facilitate C2 and the availability of equipment.

FM 90-7, Appendix C



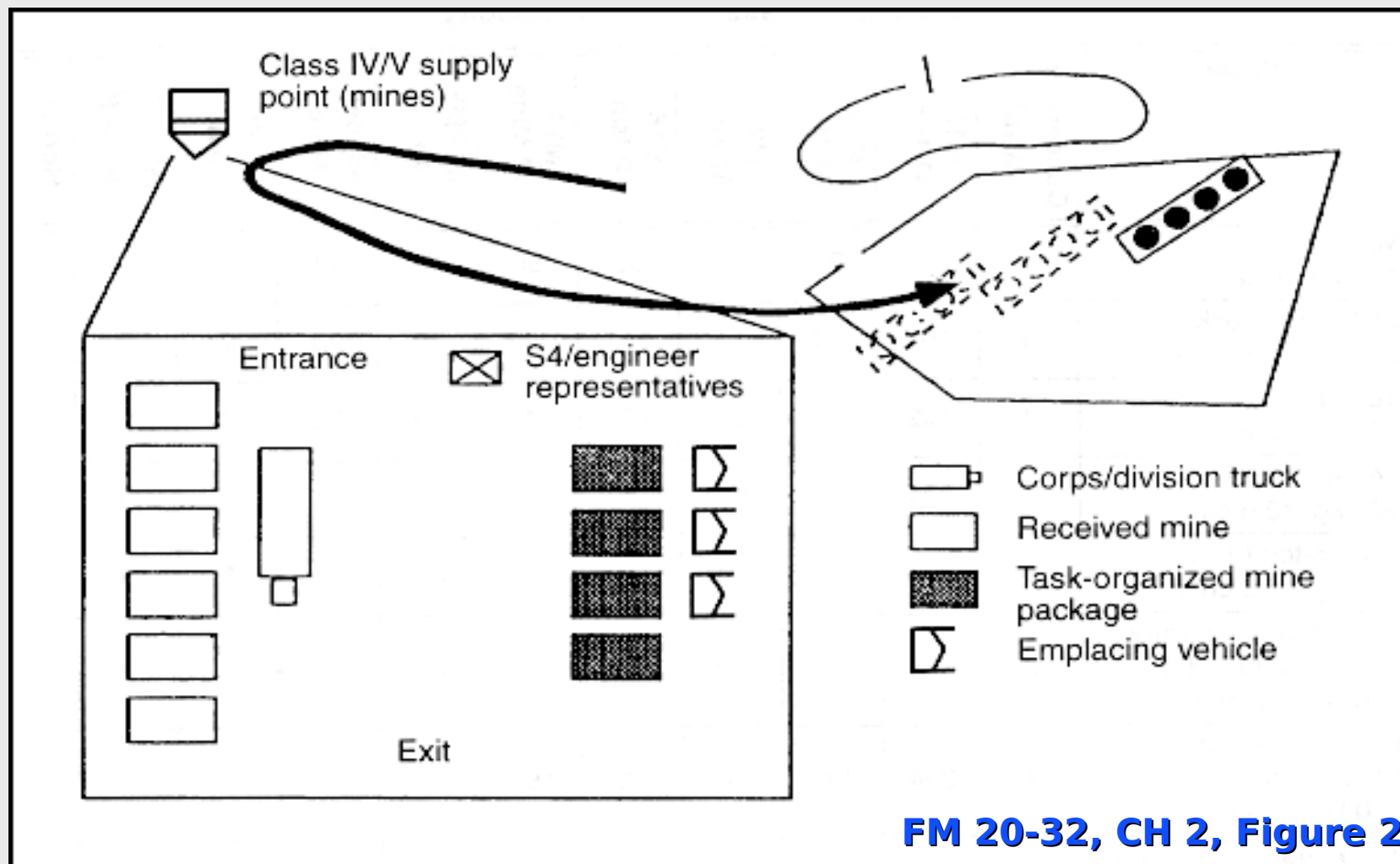
Methods of Resupply

- **Supply Point**
- **Service Station**
- **Tailgate**

FM 20-32, CH 2



Supply Point Resupply



FM 20-32, CH 2, Figure 2-21



Supply Point Resupply



ADVANTAGES

- ▢ **Minimizes unloading and loading of material.**
- ▢ **Requires minimal augmentation of haul assets.**
- ▢ **Allows manpower and equipment to be massed at a single supply point.**
- ▢ **Streamlines C 2 of material.**

FM 20-32, CH 2



Supply Point Resupply



DISADVANTAGES

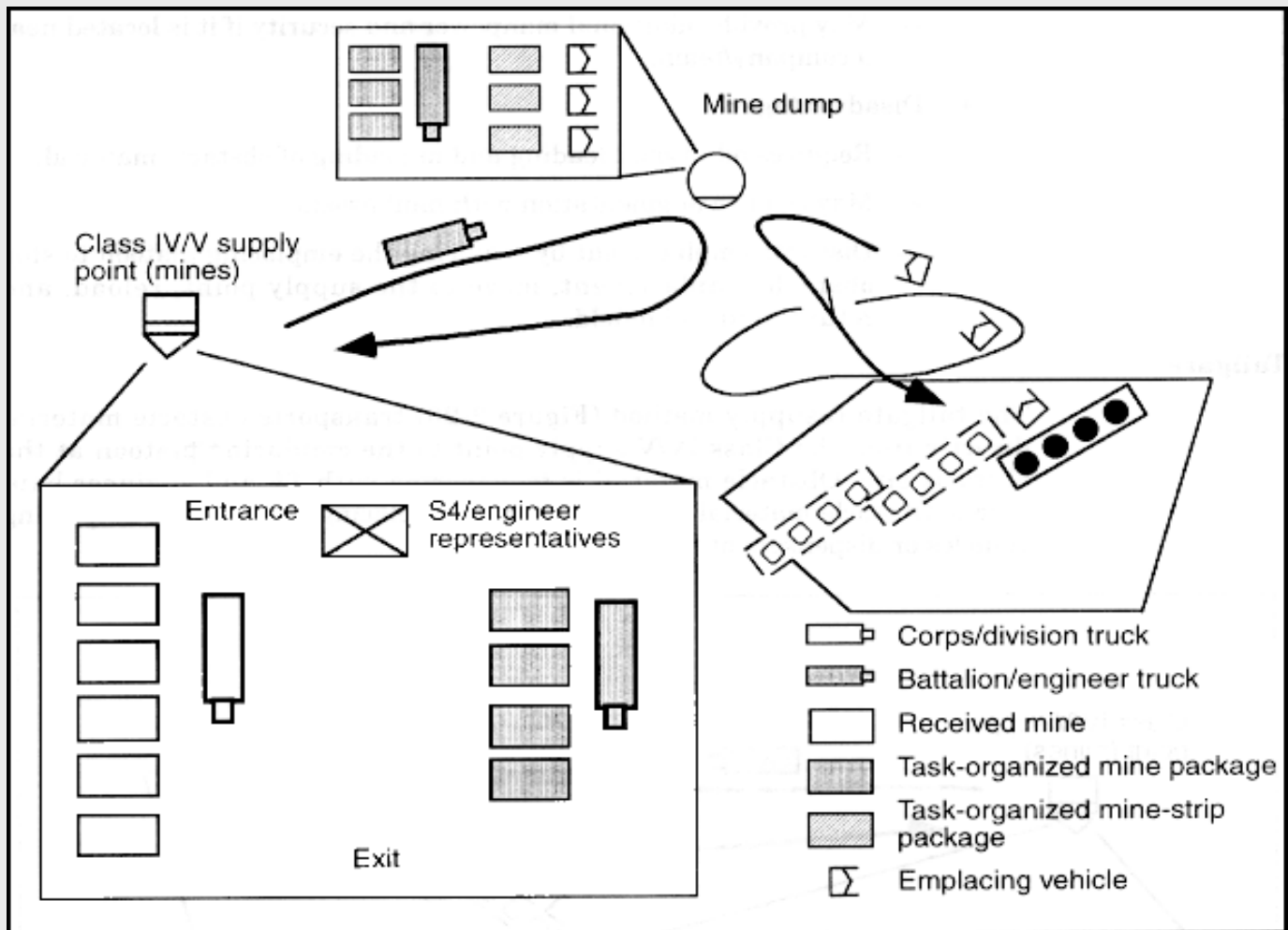
- Requires more movement of the platoon, which may take away from emplacement time.**
- Requires that the platoon move in and out of the area where the minefields are being emplaced increasing the risk of fratricide.**
- May disrupt the emplacement of individual obstacles when emplacing vehicles cannot carry enough material to start and complete the obstacle. This causes emplacing vehicles to stop work, reload, and pick up where they left off.**
- Requires a larger Class IV/V supply point that is capable of receiving mass quantities of obstacle material and multiple loading platoons simultaneously.**

FM 20-32 CH 2

TRAIN THE FORCE



Service Station Resupply





Service Station Resupply



ADVANTAGES

- ▣ Allows prestockage of obstacle material to keep pace with emplacement.**
- ▣ Minimizes the distance and the amount of time the emplacing platoon must travel to reload.**
- ▣ May provide additional manpower and security if it is located near a company/team.**

FM 20-32, CH 2



Service Station Resupply



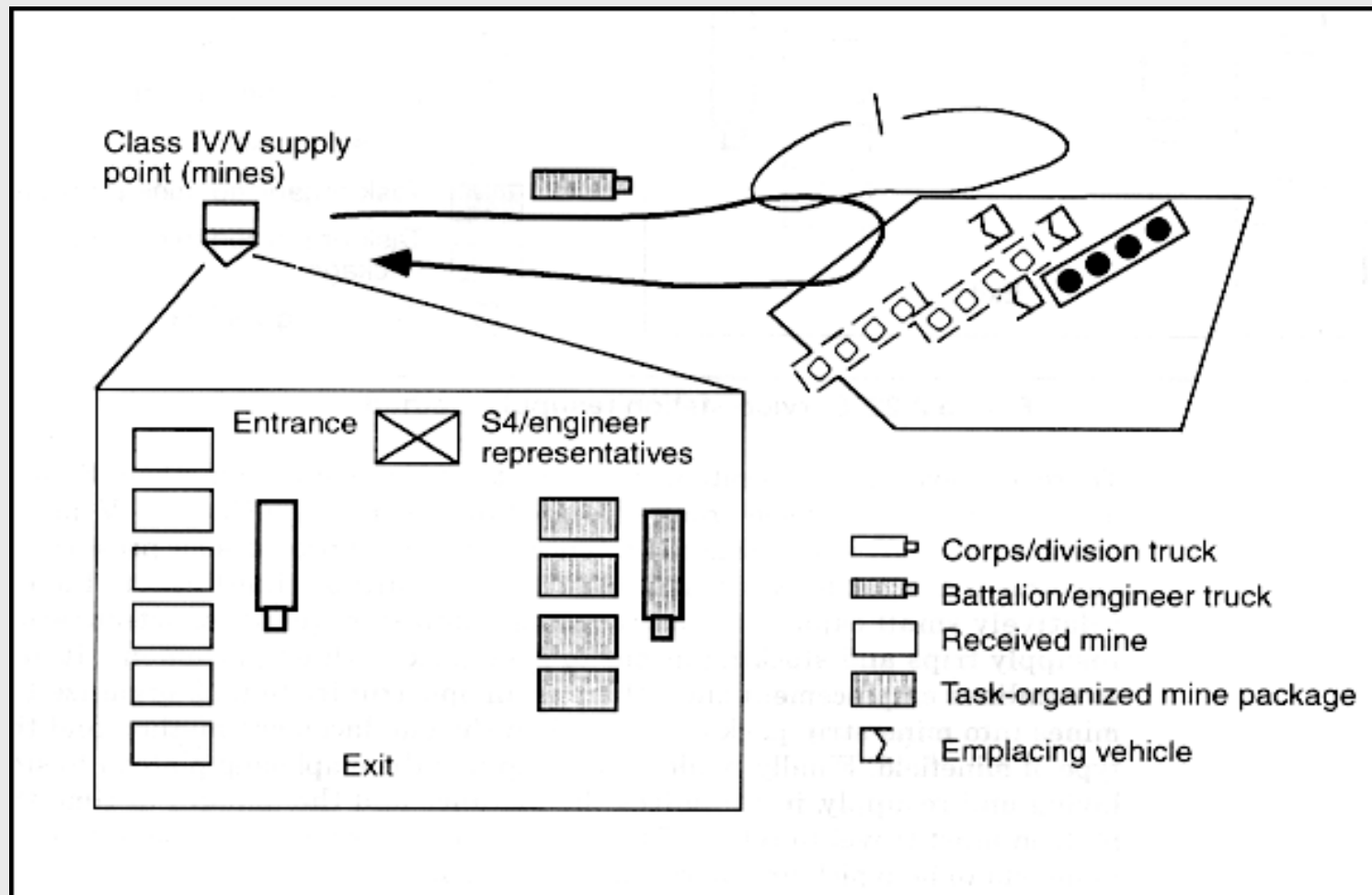
DISADVANTAGES

- Requires additional loading and unloading of obstacle material.**
- May require augmentation with haul assets.**
- Disrupts emplacement by requiring the emplacing platoon to stop obstacle emplacement, move to the supply point, reload, and return to the minefield.**

FM 20-32, CH 2



Tailgate Resupply





Tailgate Resupply

ADVANTAGES

- ▮ Minimizes loading and unloading of obstacle material.**
- ▮ Allows engineers to break contact rapidly in the event of enemy attack without losing obstacle material to the enemy.**
- ▮ Minimizes the movement of platoons in and out of the minefield (suitable for limited visibility).**

FM 20-32, CH 2



Tailgate Resupply



DISADVANTAGES

- ▮ Requires augmentation by high-capacity transportation assets that are capable of offsetting the loss in turnaround time if the vehicle has to wait at the obstacle site.**
- ▮ May result in inefficient use of haul assets.**
- ▮ Complicates C2 in linking mine transport assets with emplacing engineers since the engineers continue emplacement.**
- ▮ Causes task-organizing of minefield packages to be conducted concurrently with loading. *FM 20-32, CH 2***



Resupply Rules

- Mines should be uncrated at the Class IV/V supply point to preserve transportation assets going forward.
- Mines are task-organized into minefield packages at the Class IV/V supply point.
- Transportation from the Class IV/V supply point to the mine dump is a shared engineer and maneuver unit responsibility when a mine dump is used.
- Mines are inspected and prepared at the last supply node (Class IV/V supply point or mine dump) before they are loaded onto an emplacing vehicle or a mine-delivery system.
- Class IV/V supply points are set up using authorized ammunition procedures and distance requirements.

FM 20-32, CH 2

TRAIN THE FORCE



Class IV-V Point Location Considerations



- **Carrying Capacity**
- ▢ **Traffic Circuit**
- ▢ **Camouflage and Cover**
- ▢ **Defense**
- ▢ **Time**
- ▢ **Operators, Leaders, and Soldiers**

FM 20-32, CH 2



Requirements-Based Resourcing



1	2	3	4	5	6	7	8	9	10	11	12	13	14	Conversion of PHs Into Engineer Units
Zone	Belt	Effect	Resource Factor	AA Width	Linear kms	MF Frontage	# MFs	Mines/ MF	PHs/ MF	Mines Req	PHs Req	Mines/ Zone	PHs/ Zones	
A	1	Disrupt	0.5	5	2.5	250	10	126	1.5	1,260	15	3,278	39	2 platoons = 1 engineer company for 2 days
	2	Disrupt	0.5	4	2.0	250	8	126	1.5	1,008	12			
	3	Disrupt	0.5	4	2.0	250	8	126	1.5	1,008	12			
B	1	Fix	1.0	4	4.0	250	16	147	1.5	2,352	24	5,860	60	3 platoons = 1 engineer company(+) for 2 days
	2	Fix	1.0	6	6.0	250	24	147	1.5	3,508	36			
C	1	Block	2.4	3	7.2	500	15	630	5.0	9,450	75	18,900	150	8 platoons = 4 engineer companies for 2 days
	2	Block	2.4	3	7.2	500	18	630	5.0	9,450	75			
D	1	Block	2.4	3	7.2	500	15	630	5.0	9,450	75	26,082	203	10 platoons = 5 engineer companies for 2 days
	2	Block	2.4	4	9.6	500	20	630	5.0	12,600	100			
	3	Turn	1.2	3	3.6	500	8	504	3.5	4,032	28			
E	1	Disrupt	0.5	4	2.0	200	10	FSO determines exact requirements for artillery delivered RAAMS/ADAM to support either Obstacle Zone C or F.						
F	1	Disrupt	0.5	4	2.0	200	10							
G	1	Fix	1.0	4	4.0	276	16	80 canisters	NA	640 canisters	Air/Volcano; division controls assets. Mine quantities are in canisters.			

FM 90-7, Appendix C

TRAIN THE FORCE



Planning Factors

Number of Personnel	Quantity of Mines	Required Equipment
2-man team (2 minutes per mine)	25 mines per hour	Shears, metal cutting Grease, automotive and artillery Rags Work gloves Flashlight Night-vision goggles Pliers
Squad (7 soldiers and an NCO)	100 mines per hour	
Platoon (with leadership)	300 mines per hour; 3,600 mines per day	
Company	10,800 mines per day	
NOTE: Soldiers work 50 minutes per hour, 12 hours per day.		

FM 20-32, CH 2, Table 2-4



Personnel Requirements



Personnel	Responsibilities
TF S4/S4 NCOIC	<p>Provides overall C² and Class IV/V accountability</p> <p>Coordinates for MHE</p> <p>Is assisted by the RTO</p>
TF engineer representative	<p>Supervises organization of Class IV/V material into packages to support obstacle groups</p> <p>Provides technical assistance on Class IV/V supply-point setup and mine uncrating and inspection</p>
Infantry squad*	Downloads incoming Class V trucks
Infantry squad*	Downloads incoming Class IV trucks
Infantry squad*	Uploads outgoing Class IV/V trucks
Two infantry squads*	Uncrates and inspects mines
Support PL/PSG	Provides C ² for cross loading of Class IV/V material
Infantry squad*	Provides local security for the Class IV/V supply point

* or equivalent-sized element from a supported unit

FM 20-32, CH 2, Table 2-7

TRAIN THE FORCE



Class IV/V - "A Way"



- **ABE Plans and resources obstacle belts**
- ▢ **ABE Converts standard obstacles to BDE CCLs**
- ▢ **BDE CSS Planner converts BDE CCLs to Corps CCLs**
- ▢ **BDE CSS Planner requisitions Corps CCLs**
- ▢ **TF ENGR Plans obstacle groups and identifies resource shortages**
- ▢ **TF ENGR converts shortages to BDE CCLs**
- ▢ **TF CSS Planner requisitions shortages from BDE**
- ▢ **TF ENGR Identifies TF CL IV/V supply point location and provides to BDE to start flow of CL IV/V supplies**
- ▢ **TF Staff plans for TF CL IV/V supply point operation**



Class IV/V - "A Way"



- ▮ **Upon receipt of the order, the TF S4 coordinates with TF EN and selects on the map the proposed location for the TF's Class IV/V Point.**
- ▮ **This point must be in a secure position using METT-T, and should be established one terrain feature behind the proposed obstacle effort.**
- ▮ **Give this grid to the CSS Planner/ BDE S4 immediately, so that he can begin pushing Class IV/V forward.**



Class IV/V - "A Way"



TF S4 Planning Considerations

- **W**ork Detail
- **E**quipment
- **L**ift Assets
- **C**ommunications
- **O**rganized Yard Layout
- **M**edical Support
- **E**ngineer Expertise
- **S**ecurity



Class IV/V - "A Way"



Work **Detail**

▣ **I NCOIC and 20 Soldiers**

▣ **Unloading crew: downloads from Corps throughput assets.**

▣ **Uncrating crew: uncrates mines, inspects, configures BDE Push Packages.**

▣ **Loading crew: uploads onto TF transportation assets for transport to forward mine dumps.**



Class IV/V - "A Way"



Equipmen

- t** ☐ **Banding Machine and Material.**
- ☐ **Wire Gauntlets For Each Soldier.**
- ☐ **Tin Snips, Crow Bars, Engineer Tape.**
- ☐ **Marking Material to layout Site:**
 - ☐ **Bicycle Flags or HEMMS Poles.**
 - ☐ **Engineer Tape.**
 - ☐ **Green and Red Chemlights.**
 - ☐ **Picket Pounder**
- ☐ **Warm up/ Sleep Tent.**



Class IV/V - "A Way"



Lift Assets

- TF S4 Requests FORKLIFT and Additional Transportation Assets from the BSA.**
- FSB SPO Provides a FORKLIFT. Priority to the Main Effort TF Class IV/V Point.**
- Leaders must ensure FORKLIFT operator has NVGs to conduct night operations.**



Class IV/V - "A Way"



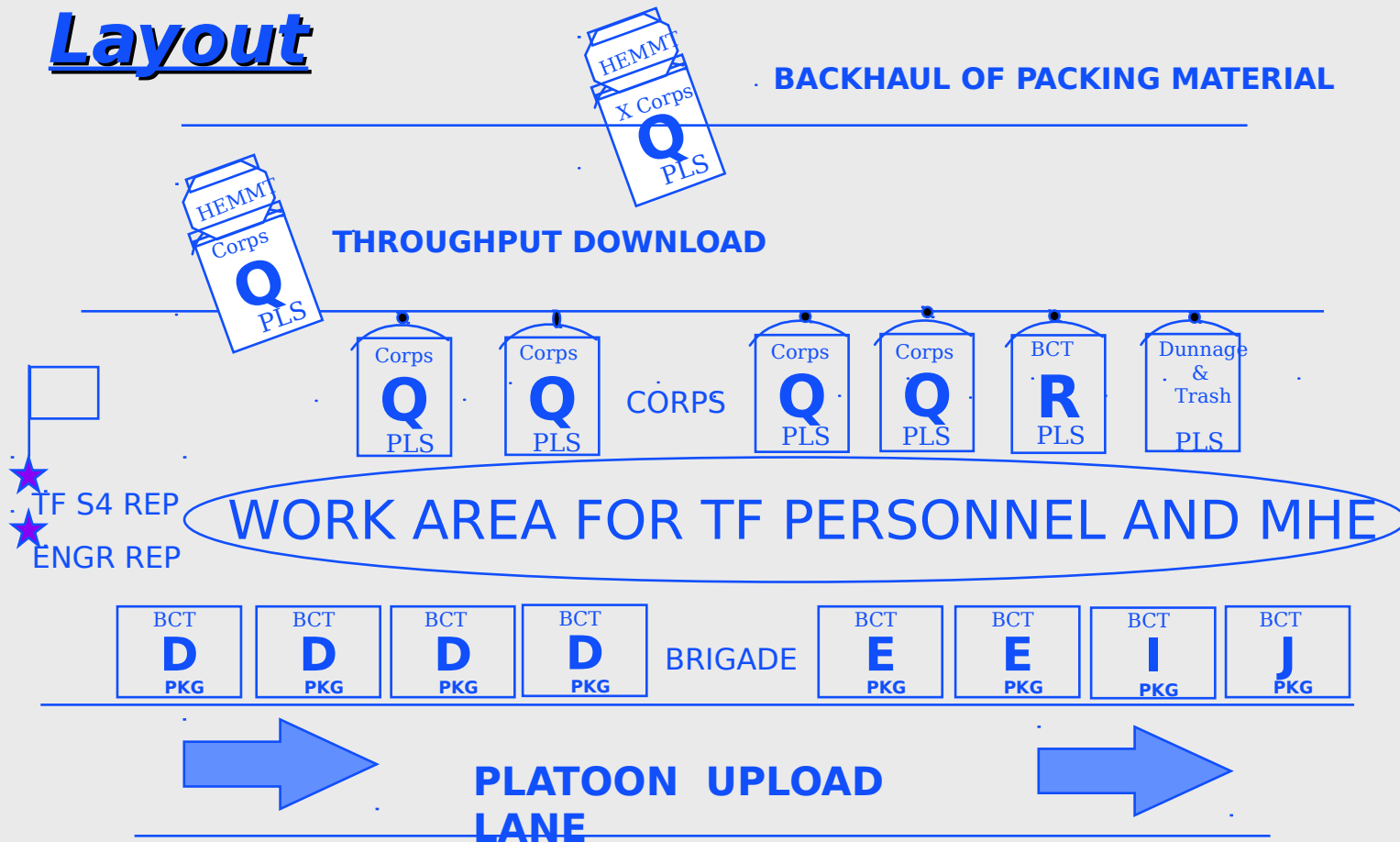
Communications

- ▮ **TF S4 maintains communications with TF TOC.**
- ▮ **Engineer Representative maintains communications with Engineer Platoons and CO TOC.**



Class IV/V - "A Way"

Organized Site Layout





Class IV/V - "A Way"



Medical Support

- ▮ **TF S4 Coordinates for Medical Support and develops an Evacuation Plan.**
- ▮ **TF Class IV/V Point NCOIC maintains list of Combat Lifesavers in workgroup, and battle roster numbers of all personnel at point.**



Class IV/V - "A Way"



Engineer **Expertise**

□ **Engineer Representative will provide technical expertise:**

- **Push Package Configuration.**
- **Oversees Proper Handling of Mines, Fuses, and Anti-Handling Devices.**
- **Monitors and records quantities of Class IV/V in the Class IV/V point.**



Class IV/V - "A Way"



Security

- ▢ **TF S4 selects Class IV/V Point location that can be easily defended against both mounted and dismounted troops.**
- ▢ **TF S4 develops and enforces the Site Security Plan.**
- ▢ **TF will provide Security Force for the Class IV/V Point.**



Class IV/V - "A Way"



Assigning Responsibilities

- ▢ **TF S4**
- ▢ **Engineer
Representative**
- ▢ **FSB SPO**



Class IV/V - "A Way"



TF S4

- **Requests forklift and additional transportation assets from the BSA.**
- ▢ **Requests additional CL I and III to support CL IV/V point operations.**
- ▢ **Tracks and accounts for the flow of CL IV/V supplies in and out of the supply point.**
- ▢ **Ensures that CL IV/V supplies are properly stockpiled.**
- ▢ **Coordinates for medical support and develops an evacuation plan.**
- ▢ **Ensures tin snips, crow bars, banding machine, banding material, and engineer tape are on site.**
- ▢ **Inventories and maintains accountability of all materials that enter and exit the site.**
- ▢ **Communicates with TF.**



Class IV/V - "A Way"



Engineer Representative

- Ensures all mines, fuses, wire, and pickets are separated and properly configured into packages.**
- Establishes and maintains radio communication with engineer platoons and engineer company TOC.**
- Monitors and records quantities of Class IV/V in the Class IV/V point.**



Class IV/V - "A Way"



FSB SPO

▮ Provides lift assets to TF Class IV/V points. Lift will arrive with the initial delivery of wire and mines. Priority of lift assets go to main effort Class IV/V Point.



Class IV/V - "A Way"

Marking the Class IV/V Point

